



## MODEL SCD-LL-HD-57 HEAVY DUTY LOW LEAKAGE CONTROL DAMPER

### Standard Construction:

**Frame:** Roll-formed galvanized steel hat-section with staked corners with integral bracing & roll-formed galvanized steel C channel insert welded to provide equivalent of 12 ga. steel.

**Blades:** 16 ga. Roll-formed, galvanized steel & 16 ga. roll-formed galvanized steel continuous rigidizing section to provide equivalent of 10 ga. steel.

**Bearings:** Nylon. Press-fit into frame.

**Axles:** Square, plated steel.

**Seals:** Pressure sensitive, 250°F dual durometer blade edge seals and flexible metal jamb seals.

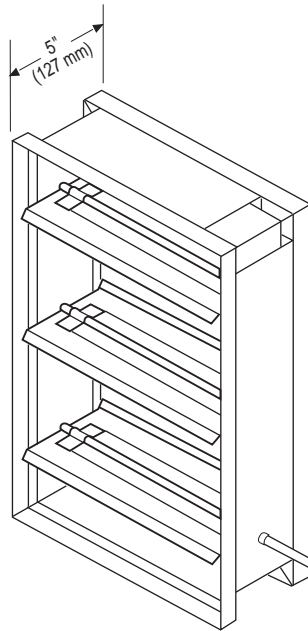
**Linkage:** Concealed in frame. Linkage bars are 12 ga. thick galvanized steel.

**Finish:** Mill galvanized.

**Extended Shaft:** Removable, 6" long x 1/2" dia. (152 mm x 12.7 mm) plated steel coupled to square axle.

**Max. Temperature:** 250°F

**Sizes:** Minimum size: 8"w x 8"h (203 mm x 203 mm)  
Maximum size: Single section - 48"w x 72"h (1219 mm x 1829 mm)  
Multiple section - size unlimited



### Features

- The SCD-LL-HD (Heavy Duty) 57 series Dampers have been designed and tested to provide rigid, robust, and yet, cost effective control dampers for special applications involving high pressure up to 9.0" w.g.

- The SCD-LL-HD-57 series dampers have pressure sensitive jamb and blade edge seals to provide the ultimate in sealing characteristics without unduly increasing torque requirements.

- The SCD-LL-HD-57 series damper's rigid frame and integrally braced corners provide true damper alignment that greatly resists being installed out of square or out of flat. This insures on site performance equal to test results.

- The SCD-LL-HD-57 dampers have been tested to AMCA Standard 500-D with the following results:

LEAKAGE	AT	AT	AT	AT
cfm/SQ. FT.	1.0" w.g.	4.0" w.g.	8.0" w.g.	12.0" w.g.
	3.5	7.0	9.8	11.2

- SCD-LL-HD-57 is available in either parallel or opposed blade models.

- Factory installed electric or pneumatic operators are available.

### Options:

**Bearings:** Bronze Oilite.  
Press fit into frame.

**Notes:**

- Dampers fabricated 1/4" (6.4 mm) under opening size unless otherwise noted
- All dimensions in ( ) indicate millimeters. Specify parallel or opposed blade action.
- All dampers 32" and over are supplied with Jackshafting. (See Jackshafting & Enclosure submittal drawing for details).

### Suggested Specification

Heavy Duty Control dampers shall be Model: SCD-LL-HD-57 by NCA Manufacturing. Damper frames shall be two-part galvanized steel box construction with equivalent strength of 12 ga. steel. Blades shall be two-part 16 ga. galvanized steel with equivalent strength of 10 ga. steel. Both blade edge and jamb seals shall be of the pressure sensitive type for low leakage. Dampers shall be rated for leakage per AMCA 500-D. Leakage shall not exceed 7.0 cfm/sq ft. at 4.0" w.g. static pressure.

Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.

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Project:

Contractor:

Location:

Address:

Architect:

P.O. Number:

Engineer:

Date:



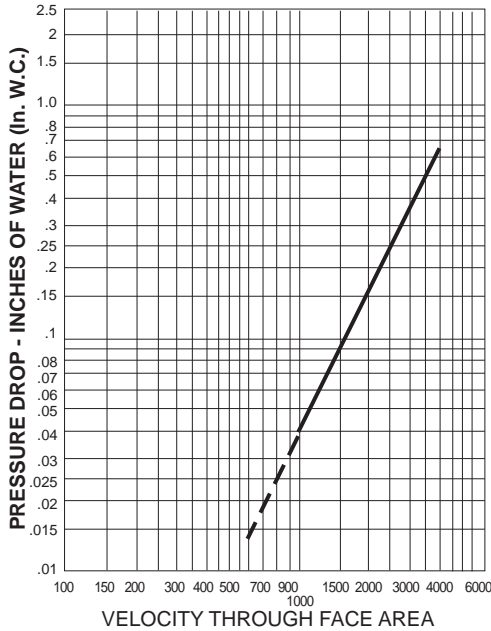
# *MODEL SCD-LL-HD-57 HEAVY DUTY LOW LEAKAGE CONTROL DAMPER*

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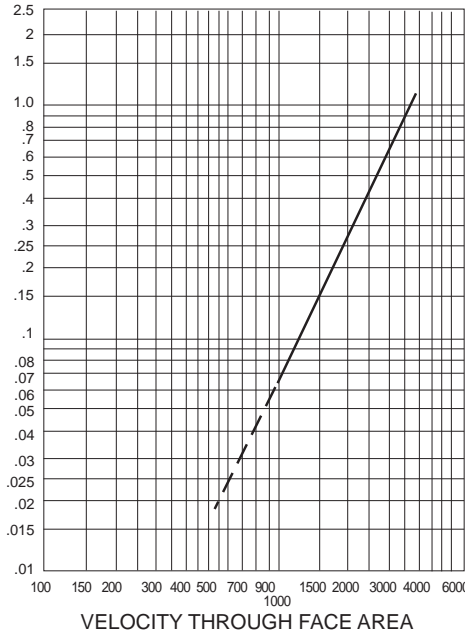
Pressure drop testing was conducted by an independent laboratory in accordance with the AMCA Standard 500-D, Fig. 5.3 ductwork upstream & downstream

## **PRESSURE DROP**

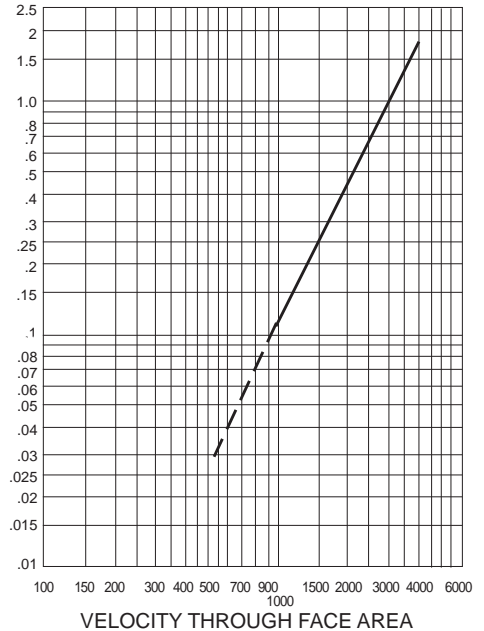
**DAMPER SIZE 36 x 36**



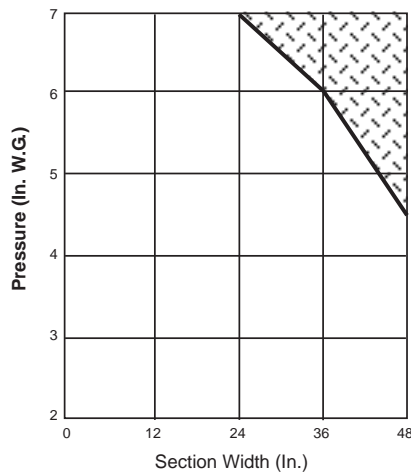
**DAMPER SIZE 24 x 24**



**DAMPER SIZE 12 X 12**



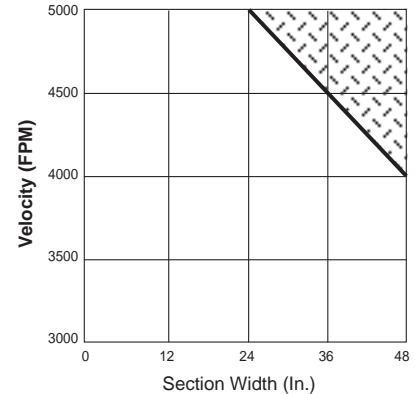
## **PRESSURE LIMITATIONS**



Pressure & Velocity Limitations presented in the adjoining graphs are conservative in order to avoid mis-applications.

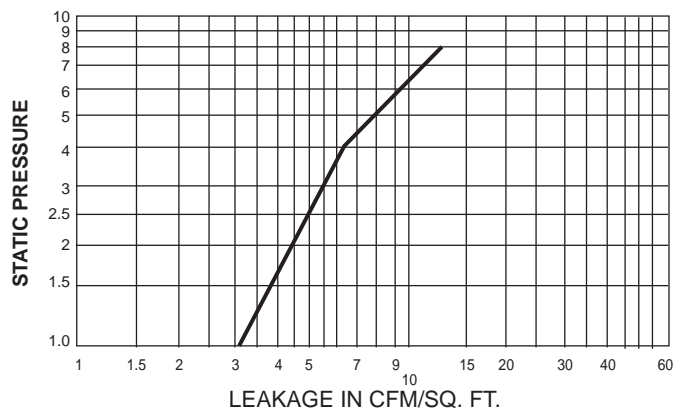
Please contact factory for application guidance if your requirements exceed published limitations.

## **VELOCITY LIMITATIONS**



## **LEAKAGE**

**DAMPER SIZE 36 x 48**



Leakage Performance test was conducted by an independent laboratory in accordance with AMCA Standard 500-D and is expressed as CFM/SQ. FT. of damper face area.

SCD-LL-HD-57 - 02-05